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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,947	05/25/2001	Peter J. Fritz	55758USA4A.002	6660

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EXAMINER

NGUYEN, DUNG V

ART UNIT PAPER NUMBER

3723

DATE MAILED: 03/24/2004

22

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/865,947

Applicant(s)

FRITZ ET AL.

Examiner

Dung V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 18 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-13, 17 and 20 is/are rejected.
- 7) ☒ Claim(s) 3, 14, 15, 19 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                         |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. The indicated allowability of claims 1-15 and 17-19 and 21 is withdrawn in view of the newly discovered reference(s) to MacKay Jr. Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 12, 13, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by MacKay Jr. (USPN 3,667,169). MacKay Jr. discloses an abrasive article 10 comprising a backing plate 12 having a first major surface and a second major surface opposite the first major surface, wherein the backing plate 12 includes a central aperture 36 extending therethrough, and wherein the backing plate comprising thermoplastic binder material and fibrous reinforcing material, an abrasive layer 14 secured to the first major surface of the backing plate 12, a fastener 16 press fitted to the backing plate 12 so as to be concentric with the central aperture 36, wherein the fastener 16 includes a plurality of penetrating members 17, wherein each penetrating member 17 pierces the backing plate 12 from a grinding surface side, wherein the backing plate 12 is generally circular, wherein the abrasive layer 14 is comprised of nonwoven abrasive material, wherein the fastener 16 is a quick-change type. MacKay Jr. also inherently discloses a method of abrading a surface comprising providing an

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abrasive article 10 described above, attaching the abrasive article 10 to a shaft 28 through a central aperture 36 of the abrasive article 10, contacting the abrasive layer 14 with a surface of a workpiece, moving the abrasive article 10 relative to the surface of the workpiece (note Fig. 1-4, col. 2, line 28 to col. 3, line 66).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacKay Jr. in view of Stout et al (USPN 5,316,812). MacKay Jr. discloses the claimed invention as described above, however, MacKay Jr. does not disclose the thermoplastic binder material includes polyamide, polyester or the fibrous reinforcing material comprises glass fibers, the backing plate has a thickness of about 0.51 mm to about 1.78 mm. Stout et al discloses a thermoplastic binder material includes polyamide, polyester or the fibrous reinforcing material comprises glass fibers, a backing plate has a thickness of about 0.5 mm to about 1.2 mm (note Fig. 1 and 2, col. 2, lines 23-62, col. 5, lines 15-20). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a thermoplastic binder material includes polyamide, polyester or the fibrous reinforcing material comprises glass fibers, a backing plate has a thickness of about 0.51 mm to about 1.78 mm in order to provide

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the backing plate a harden composition that will not substantially deform or disintegrate during use.

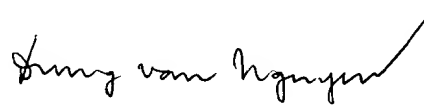
***Allowable Subject Matter***

6. Claims 16 and 20 are allowed.
7. Claims 3, 14, 15, 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DVN  
March 12, 2004

  
**DUNG VAN NGUYEN**  
**PRIMARY EXAMINER**